

WHAT IS CLAIMED IS:

1. A medical instrument comprising:

a swingable operating section formed of a pair of forceps which rock around a first rocking axis;

5 a tubular sheath having a distal end portion situated on a proximal end side of the operating section, the distal end portion having a circular-section portion having a circular cross section perpendicular to a longitudinal central axis thereof and a pair of flat portions formed by cutting the  
10 opposite sides of the circular-section portion and in sliding contact with respective proximal end portions of the forceps;

a manipulator which advances and retreats in the  
15 longitudinal direction of the sheath, thereby rocking the forceps around the first rocking axis; and

a junction which connect the manipulator for rocking motion around a second rocking axis with respect to the forceps in the flat portions,

20 the junction being situated on or near a reference plane passing through the longitudinal central axis of the sheath and extending parallel to the second rocking axis when the operating section is closed.

2. A medical instrument according to claim 1,  
25 wherein a plane passing through the first rocking axis and extending parallel to the reference plane is not coincident with a plane passing through the second

rocking axis and extending parallel to the reference plane.

3. A medical instrument according to claim 1,  
wherein the first rocking axis is not on the reference  
5 plane.

4. A medical instrument according to claim 1,  
wherein the manipulator and the junction have wires and  
pins, respectively.

5. A medical instrument according to claim 1,  
10 which further comprises a recovery line located on the  
proximal end side of the forceps and used to recover an  
organic tissue, control wires forming the manipulator,  
passed through the sheath, and adapted to be connected  
to the forceps by the junction after being led out of  
15 the sheath through the distal end portion, outlet  
portions at the distal end portion through which the  
control wires are led out of the sheath, and a slide  
member connected to the respective proximal end  
portions of the control wires and serving to move the  
20 control wires in the axial direction thereof, thereby  
opening or closing the forceps; and wherein the control  
wire is provided with a springy molded part premolded  
into a predetermined shape, the molded part being  
adapted to be deformed from the predetermined shape and  
25 engage the corresponding outlet portion when an  
operating force is applied to the slide member so that  
the forceps are fully closed, and the molded part being

adapted to be restored to the predetermined shape so that the molded part and the outlet portion are disengaged and the forceps are urged to open when the slide member is released from the operating force.

5           6. A medical instrument according to claim 1, wherein the first rocking axis is composed of shank portions protruding radially outward from the flat portions and spread portions formed on the respective distal ends of the shank portions corresponding thereto and larger in outer diameter larger than the shank  
10 portions.

7. A medical instrument according to claim 6, wherein the spread portions are formed by spreading the shank portions.

15           8. A medical instrument according to claim 1, which further comprises tubular pins fitted on the first rocking axis, and wherein each of the forceps has a support hole penetrated by the first rocking axis, each of the pins being composed of a shank portion,  
20 having inner and outer diameters such that the pin can be fitted between the inner surface of the support hole of the forceps and the first rocking axis to support the forceps, and a spread portion formed on the distal end of the shank portion projecting from the support  
25 hole and having an outer diameter larger than that of the shank portion.

9. A medical instrument according to claim 8,

wherein the spread portions are welded to the first rocking axis.

10. A medical instrument comprising:

5 a swingable operating section formed of a pair of forceps which rock individually around a rocking axis corresponding thereto; and

10 a tubular sheath having a distal end portion situated on the proximal end side of the operating section, the distal end portion having a circular-section portion having a circular cross section perpendicular to a longitudinal central axis thereof and a pair of flat portions formed by cutting the opposite sides of the circular-section portion and in sliding contact with the respective proximal end portions of the forceps,

15 the rocking axis being formed integrally with the flat portions so as not to project into the bore of the distal end portion.

20 11. A medical instrument according to claim 10, wherein the rocking axis is composed of shank portions protruding radially outward from the flat portions and spread portions formed on respective distal ends of the shank portions corresponding thereto and in outer diameter larger than the shank portions.

25 12. A medical instrument according to claim 11, wherein the spread portions are formed by spreading the shank portions.

13. A medical instrument according to claim 10,  
which further comprises tubular pins fitted on said  
rocking axis, and wherein the forceps has a support  
hole penetrated by the rocking axis, the pin being  
5 composed of a shank portion, having inner and outer  
diameters such that the pin can be fitted between the  
inner surface of the support hole of the forceps and  
the rocking axis to support the forceps, and a spread  
portion formed on the distal end of the shank portion  
10 projecting from the support hole and having an outer  
diameter larger than that of the shank portion.

14. A medical instrument according to claim 13,  
wherein the spread portions are welded to each said  
rocking axis.

15 15. A medical instrument comprising:

a swingable operating section formed of a pair of  
forceps which rock individually around rocking axes  
corresponding thereto; and

a tubular sheath having a distal end portion  
20 situated on a proximal end side of the operating  
section, the distal end portion having a circular-  
section portion having a circular cross section  
perpendicular to a longitudinal central axis thereof  
and a pair of flat portions formed by cutting the  
25 opposite sides of the circular-section portion and in  
sliding contact with the respective proximal end  
portions of the forceps,

the rocking axes being not on a reference plane passing through the longitudinal central axis of the sheath and extending parallel to the rocking axes.